

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

CELLULAR COMMUNICATIONS
EQUIPMENT LLC,

Plaintiff,

v.

HTC CORPORATION, ET AL.

Defendants.

CIVIL ACTION NO. 6:13-cv-507

CONSOLIDATED LEAD CASE

**PLAINTIFF'S OPENING BRIEF
ON CLAIM CONSTRUCTION**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	APPLICABLE LAW	1
A.	The claims define the scope of the invention.....	1
B.	Claims are interpreted in light of the intrinsic record	2
C.	Extrinsic evidence may not contradict or limit the claim language.....	3
D.	Special procedures for means-plus-function limitations.....	3
III.	DISPUTED TERMS AND PHRASES.....	4
A.	U.S. Patent No. 6,819,923.....	4
1.	“means for receiving a neighbor cell information message”	5
2.	“means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell”	8
B.	U.S. Patent No. 6,810,019.....	13
1.	“processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions”	14
2.	“the processing means are also arranged to set for the measurement pattern definition a delay according to the measurement pattern definitions”	17
C.	U.S. Patent No. 7,941,174.....	19
1.	“a transmit power difference which is to be maintained” / “maintaining a previously determined transmit power difference”	20
D.	U.S. Patent No. 8,055,820.....	22
1.	“the designating unit”	22
E.	U.S. Patent No. 7,218,923.....	27
1.	“a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network”	28
2.	“based on the message”	29

TABLE OF AUTHORITIES

CASES

<i>3M Innovation Props. Co. v. Tredegar Corp.</i> 725 F.3d 1315 (Fed. Cir. 2013).....	2-3
<i>Apex Inc. v. Raritan Computer, Inc.</i> 325 F.3d 1364 (Fed. Cir. 2003)	26
<i>Apple Inc. v. Motorola, Inc.</i> 757 F.3d 1286 (Fed. Cir. 2014).....	4, 26
<i>Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.</i> 262 F.3d 1258 (Fed. Cir. 2001)	3
<i>C4Cast.com, Inc. v. Dell, Inc.</i> No. 2:12-cv-271, 2013 U.S. Dist. Lexis 93199 (E.D. Tex. Jul. 3, 2013)	7
<i>Digital Biometrics, Inc. v. Identix, Inc.</i> 149 F.3d 1335 (Fed. Cir. 1998)	2
<i>Ergo Licensing, LLC v. CareFusion 303, Inc.</i> 673 F.3d 1361 (Fed. Cir. 2012)	4
<i>Finistar Corp. v. DirecTV Group</i> 523 F.3d 1323 (Fed. Cir. 2008)	3
<i>Inventio AG v. Thyssenkrupp Elevator Ams.</i> 649 F.3d 1350 (Fed. Cir. 2011)	3
<i>Kara Tech. Inc. v. Stamps.com Inc.</i> 582 F.3d 1341 (Fed. Cir. 2009)	2
<i>In re Katz Interactive Call Processing Patent Litigation</i> 639 F.3d 1303 (Fed. Cir. 2011)	4, 7
<i>Maurice Mitchell Innovations, L.P. v. Intel Corp.</i> 2006 U.S. Dist Lexis 41453 (E.D. Tex. June 21, 2006)	19, 26
<i>Med Instrumentation & Diagnostics Corp. v. Elekta AB</i> 344 F.3d 1205 (Fed. Cir. 2003)	3
<i>Novo Indus., L.P. v. Micro Molds Corp.</i> 350 F.3d 1348, 1354 (Fed. Cir. 2003).....	26

<i>Optimize Tech. Solutions v. Staples, Inc.</i> No. 2:11-cv-419, 2013 U.S. Dist. Lexis 164867 (E.D. Tex. Nov. 20, 2013).....	4, 7, 12
<i>Phillips v. AWH Corp.</i> 415 F.3d 1303 (Fed. Cir. 2005).....	1-3
<i>Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.</i> 711 F.3d 1348 (Fed. Cir. 2013)	2
<i>Rexnord Corp. v. Laitram Corp.</i> 274 F.3d 1336 (Fed. Cir. 2001)	2
<i>Smartphone Techs. LLC v. Research in Motion Corp.</i> 2012 U.S. Dist. LEXIS 108370 (E.D. Tex. Aug. 2, 2012)	26
<i>STMicroelectronics, Inc. v. Motorola, Inc.</i> 327 F. Supp. 2d 687 (E.D. Tex. 2004)	26
<i>Typhoon Touch Techs., Inc. v. Dell, Inc.</i> 659 F.3d 1376 (Fed. Cir. 2011)	4, 12
<i>Variant Holdings v. Z Resorts LLC</i> No. 2:11-cv-290, 2013 U.S. Dist. Lexis 67943 (E.D. Tex. May 9, 2013)	7
<i>Vitronics Corp. v. Conceptiontronic</i> 90 F.3d 1576 (Fed. Cir. 1996)	2
<i>WMS Gaming, Inc. v. Int’l Game Tech.</i> 184 F.3d 1339 (Fed. Cir. 1999)	3

STATUTE

35 U.S.C. § 112(6)	3, 5, 8, 14, 17, 22, 25-27
--------------------------	----------------------------

TABLE OF EXHIBITS

Exhibit A	Declaration and Curriculum Vitae of Esmael Dinan, Ph.D
Exhibit B	U.S. Patent No. 6,819,923
Exhibit C	Excerpts from Response dated May 3, 2004 filed during prosecution of U.S. Patent No. 6,819,923
Exhibit D	U.S. Patent No. 6,810,019
Exhibit E	U.S. Patent No. 7,941,174
Exhibit F	U.S. Patent No. 8,055,820
Exhibit G	Excerpts from Application dated Nov. 5, 2008 filed during prosecution of U.S. Patent No. 8,055,820
Exhibit H	Excerpts from Office Action dated Sept. 30, 2010 filed during prosecution of U.S. Patent No. 8,055,820
Exhibit I	Excerpts from Response dated May 10, 2011 filed during prosecution of U.S. Patent No. 8,055,820
Exhibit J	Excerpts from Petition for <i>Inter Parties</i> Review of U.S. Patent No. 8,055,820 filed July 10, 2014 by NEC Corporation of America, NEC CASIO Mobile Communications, Ltd., HTC Corporation, ZTE (USA), Amazon.com, Inc., Pantech Co., Ltd., Pantech Wireless, Inc., LG Electronics, Inc., LG Electronics U.S.A., Inc., and Dell Inc.,.
Exhibit K	U.S. Patent No. 7,218,923
Exhibit L	Excerpts from Petition for <i>Inter Parties</i> Review of U.S. Patent No. 7,218,923 filed July 10, 2014 by NEC Corporation of America, NEC CASIO Mobile Communications, Ltd., HTC Corporation, HTC America, ZTE (USA), Pantech Co., Ltd., Pantech Wireless, Inc., LG Electronics, Inc., and LG Electronics U.S.A., Inc.
Exhibit M	Defendants' P.R. 4-2 Disclosures
Exhibit N	Excerpts from Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (IEEE Press, John Wiley & Sons 2004)
Exhibit O	Excerpts from Martin H. Weik, D.Sc., Communications Standard Dictionary (Van Nostrand Reinhold Co. 1983)

Exhibit P Excerpts from Julie K. Petersen, Data & Telecommunications Dictionary (CRC Press 1999)

I. INTRODUCTION

Plaintiff Cellular Communications Equipment LLC (“CCE” or “Plaintiff”) submits this opening claim construction brief addressing, U.S. Pat. No. 6,819,923 (“the ’9923 patent”), U.S. Pat. No. 6,810,019 (“the ’019 patent”), U.S. Pat. No. 7,941,174 (“the ’174 patent”), U.S. Pat. No. 8,055,820 (“the ’820 patent”), and U.S. Pat. No. 7,218,923 (“the ’8923 patent”).¹ These patents are part of a broader portfolio acquired from Nokia Siemens Networks (“NSN”) and generally relate to mobile communications. The ’9923 patent, ’174 patent, ’019 patent, and ’820 patent have been declared essential to practicing GSM, UMTS, and/or LTE wireless standards, and cover aspects of implementation and use of those technologies. The ’8923 patent relates to message security features in a mobile terminal. The accused products are mobile devices, including cellular phones, tablets, and wireless cards.

Ten claim terms are disputed. Defendants contend that seven terms, including four means-plus-function limitations, are indefinite, and have sought leave to file a summary judgment motion. CCE affirmatively addresses means-plus-function limitations in the present brief and will respond to other indefiniteness allegations in its opposition to any summary judgment motion that the Court permits. The three other disputed terms use ordinary language in its ordinary sense and require no construction. Nonetheless, Defendants propose limiting constructions that are unsupported by the intrinsic record and must be rejected.

II. APPLICABLE LAW

A. The claims define the scope of the invention.

The claims of a patent “define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citation omitted).

¹ The parties have filed stipulations of dismissal regarding U.S. Pat. No. 6,377,804 and U.S. Pat. No. 7,215,962.

Consequently, “[c]laim construction begins with the language of the claim.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1360 (Fed. Cir. 2013). Claim terms generally receive their ordinary and customary meaning, which is the meaning that a person of ordinary skill in the art would have understood the claim term to have as of the filing date of the patent application. *Phillips*, 415 F.3d at 1313. “[U]nless compelled to do otherwise, a court will give a claim term the full range of its ordinary meaning as understood by an artisan of ordinary skill.” *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001).

B. Claims are interpreted in light of the intrinsic record.

Notwithstanding the primacy of the claim language, courts interpret claim language “in light of the intrinsic evidence of record, including the written description, the drawings, and the prosecution history.” *Power Integrations*, 711 F.3d at 1360 (citation omitted). The specification can be useful, for example, to “determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning.” *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Additionally, “[i]diosyncratic language, highly technical terms, or terms coined by the inventor are best understood by reference to the specification.” *3M Innovation Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1321 (Fed. Cir. 2013). Although the specification can be a useful guide to how the inventor used a disputed term, “limitations discussed in the specification may not be read into the claims.” *Id.*; *see also Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009).

The prosecution history can also inform the meaning of the claim language “because it may contain contemporaneous exchanges between the patent applicant and the PTO about what the claims mean.” *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1344 (Fed. Cir. 1998). The prosecution history, however, cannot be relied upon “to construe the meaning of [a] claim to

be narrower than it would otherwise be unless a patentee limited or surrendered claim scope through a clear and unmistakable disavowal.” *3M Innovation Props.*, 725 F.3d at 1322.

C. Extrinsic evidence may not contradict or limit the claim language.

Extrinsic evidence, such as technical dictionaries, may “help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand claim terms to mean,” but such evidence should be considered in the context of the intrinsic record. *Phillips*, 415 F.3d at 1319. Extrinsic evidence cannot be used to “vary, contradict, expand, or limit the claim language from how it is defined, even by implication, in the specification or file history.” *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1269 (Fed. Cir. 2001).

D. Special procedures for means-plus-function limitations.

Pursuant to 35 U.S.C. § 112(6), a patentee may to express a claim limitation as a means for performing a specified function, without reciting a particular structure. *See Inventio AG v. Thyssenkrupp Elevator Ams.*, 649 F.3d 1350, 1355-56 (Fed. Cir. 2011). Such elements are construed to cover the corresponding structure clearly linked or associated with the claimed function in the specification or file history, and equivalents of those structures. *Med Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1219 (Fed. Cir. 2003).

In general, the corresponding structure for a computer-implemented means-plus-function limitation is an algorithm that carries out the claimed function. *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The algorithm may be disclosed in any understandable form, including “as a mathematical formula, in prose, as a flow chart, or in any other manner that provides sufficient structure,” though a term may be indefinite if the specification fails to disclose such an algorithm. *Finistar Corp. v. DirecTV Group*, 523 F.3d

1323, 1340 (Fed. Cir. 2008); *see also Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298-99 (Fed. Cir. 2014) (“to one of skill in the art, the ‘structure’ of computer software is understood through, for example, an outline of an algorithm, a flowchart, or a specific set of instructions or rules.”).

An algorithm is not required, however, if the recited function can be achieved by a general-purpose computer without special programming. *In re Katz*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’... those functions can be achieved by any general purpose computer without special programming. As such, it was not necessary to disclose more structure than the general purpose processor that performs those functions.”); *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012) (“[A] general-purpose computer is sufficient structure if the function of a term such as ‘means for processing’ requires no more than merely ‘processing,’ which any general-purpose computer may do without any special programming.”).

This exception to the algorithm requirement “reinforces the self-evident proposition that the required degree of disclosure of corresponding structure is commensurate with the complexity of the claimed function.” *Optimize Tech. Solutions v. Staples, Inc.*, No. 2:11-cv-419, 2013 U.S. Dist. Lexis 164867, *122 (E.D. Tex. Nov. 20, 2013); *see also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011).

III. DISPUTED TERMS AND PHRASES

A. U.S. Patent No. 6,819,923

The '9923 patent describes a technique for reducing network resources used to transmit “neighbor cell information messages” periodically sent in a cellular network to inform mobile devices about nearby base stations. Ex. B at 1:34-67; 2:2-10. The patent teaches that these messages can be compressed by “identifying redundant information in the [message], and

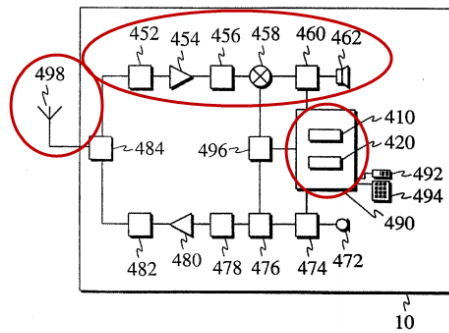
removing at least part of the redundancy by specifying the repeating values of at least one parameter only once.” *Id.* at 2:11-14. This may be accomplished using a table that includes parameter values common to several neighbor cells. *See, e.g., id.* at 2:15-22. In lieu of repeating these common values multiple times in a message, a value in the table is represented by a pointer such as an index. *Id.* This reduces redundancy, thereby shortening the time required to transmit and receive the messages and conserving network capacity. *Id.* at 2:2-10.

The parties dispute the meanings of two means-plus-function terms in independent claim 11. As explained below, the patent discloses structure that a person skilled in the art would understand to be clearly linked to each function. Defendants wrongly allege that the terms are indefinite and refuse to propose any corresponding structure.

1. “means for receiving a neighbor cell information message” (cl. 11)

CCE’s Proposed Construction	Defendants’ Proposed Construction
Function: receiving a neighbor cell information message Structure: an antenna, a receiver, and a microprocessor (1:34-47; 2:4-7; 6:19-61; Fig. 7), and equivalents thereof (no special algorithm required)	<u>Indefinite</u> This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6. Function: “receiving a neighbor cell information message” Structure: no corresponding structure (algorithm) disclosed

The parties agree that the claimed function is “receiving a neighbor cell information message.” The structure disclosed for performing this function is an antenna, receiver, and microprocessor. Specifically, Figure 7 depicts a mobile station 10 that includes a receiver (comprising components 452-462), antenna 498, and control block 490 (comprising a microprocessor). *See* Ex. B at Fig. 7; 6:17-62.

**Fig. 7**

Each of these elements is necessary and clearly linked to the claimed function. Ex. A at ¶¶ 72-77. Wireless communications are impossible without an antenna, and a person of ordinary skill in the art would recognize that antenna 498 is essential for the claimed mobile communication means to “receive” a message. *Id.* at ¶ 74. The receiver 452-462 is likewise critical to “receiving” a message. As its name indicates, it is a component specifically designed to receive signals. *Id.* at ¶ 73; Ex. N at CCE2448; Ex. O at CCE2452; Ex. P at CCE2456. In fact, the patent expressly notes that a benefit of the invention is that neighbor cell information messages are smaller and thus “reserv[e] the receiver of a mobile station for a shorter time than in the prior art.” Ex. B at 2:4-7; *see also id.* at 7:2-8 (explaining that the inventive method “allows the receivers of the mobile stations to use more time to [sic] other duties.”). In other words, the receiver is occupied less often because the neighbor cell information messages it receives are compressed.

The patent also explains that “means 410 for receiving a neighbor cell information message” is realized using software programs “executed by a microprocessor of the control block 490.” *Id.* at 6:41-61. Thus, an antenna, receiver, and microprocessor work together to “receiv[e] a neighbor cell information message.” Ex. A at ¶¶ 72-77.

Defendants wrongly contend that a special algorithm is required for this element. To the contrary, the structure for performing the claimed function is a combination of hardware (an

antenna, receiver, and microprocessor), and no algorithm is required. *See Variant Holdings v. Z Resorts LLC*, No. 2:11-cv-290, 2013 U.S. Dist. Lexis 67943, *116-119 (E.D. Tex. May 9, 2013).

And, even if the supporting structure was simply a processor (without an antenna and receiver), the claimed function — “receiving” a message — is so basic that it may be performed by any general-purpose computer, and no special algorithm is necessary. *See* Ex. A at ¶ 76; *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1316 (Fed. Cir. 2011); *C4Cast.com, Inc. v. Dell, Inc.*, No. 2:12-cv-271, 2013 U.S. Dist. Lexis 93199, *61 (E.D. Tex. Jul. 3, 2013); *Optimize Tech. Solutions*, 2013 U.S. Dist. Lexis 164867 at *132-133; *C4Cast.com, Inc. v. Dell, Inc.*, No. 2:12-cv-271, 2013 U.S. Dist. Lexis 93199, *60-62 (E.D. Tex. Jul. 3, 2013); *Variant*, 2013 U.S. Dist. Lexis 67943 at *116-119. Indeed, the *Katz* court ruled that a general-purpose computer without special-purpose programming was sufficient structure for “processing,” “receiving,” and “storing.” *In re Katz*, 639 F.3d 1303 at 1316.

Thus, Defendants’ refusal to identify any proposed structure for this claim element is baseless. Indeed, Defendants’ dubious motives are exposed by the fact that they take the same position on every means-plus-function element in this proceeding. That is, for each claimed function of each asserted patent, Defendants myopically focus on a single statement that the function can be performed by a processor, ignoring the remainder of the substantive disclosure. Their approach is improper because it fails to reflect the understanding of a skilled artisan.

In this particular instance, Defendants contend that an *antenna* and *receiver* are not sufficiently linked to “receiving” a message. *See* Doc. No. 272-1 at 2-3. But the claims and specification are to be read from the perspective of one skilled in the art, and the link between “receiving” a message, on the one hand, and the “receiver” and “antenna” described in the patent, on the other hand, is self-evident to such an individual. Ex. A at ¶¶ 71-77. Defendants’

refusal to acknowledge such a fundamental link, as well as their disregard for the *Katz* exception, demonstrates that they have forsaken credibility in hope of tactical advantage.

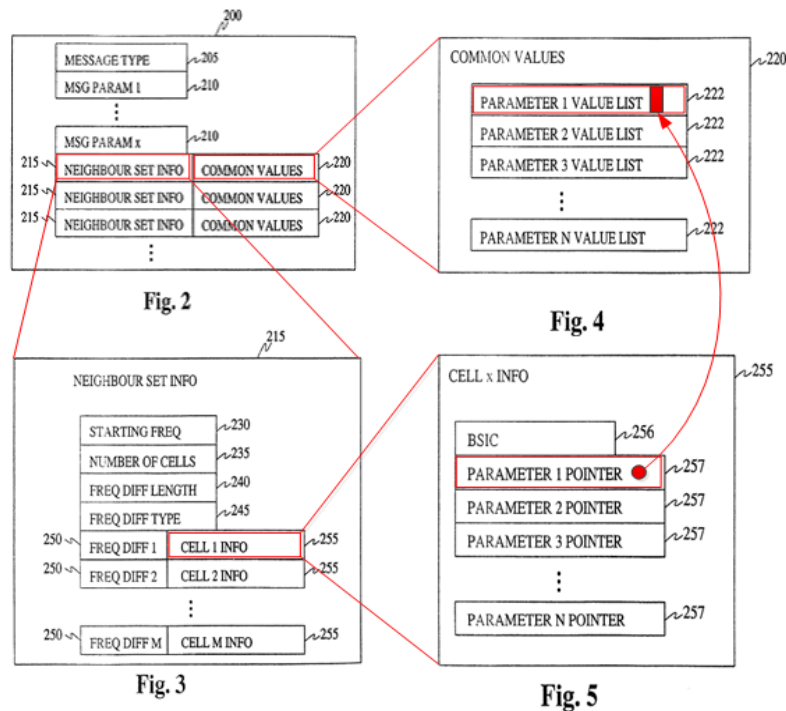
2. “means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell” (cl. 11)

CCE’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell</p> <p>Structure: a microprocessor (6:57-61; Fig. 7) configured to use a parameter (or set of parameters) specified by an index (or pointer) for a parameter of a neighbor cell (2:15-28; 2:35-43; 3:4-26; 4:11-5:17; 5:35-46; 7:39-49; Figs. 2-5), and equivalents thereof</p>	<p>Indefinite</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell”</p> <p>Structure: no corresponding structure (algorithm) disclosed</p>

As noted above, the ’9923 Patent teaches a technique to efficiently communicate neighbor cell information messages. *See, e.g.*, Ex. B at 2:1-14, 3:4-26. The “neighbor cell information message” recited in claim 11 includes (1) a set of specific parameter values and (2) cell information that includes (a) at least one specific parameter value for a first parameter and (b) an index for a second parameter indicating which value in the set of specific parameter values is used for the second parameter:

11. A mobile communication means for communication with a cellular telecommunication network, comprising:
means for receiving a neighbor cell information message,
wherein said neighbor cell information message comprises:
a set of specific parameter values; and
cell information, wherein, for each cell of a plurality of neighbor cells, said cell information comprises:
at least one specific parameter value for a first parameter, and
an index for a second parameter, said index indicating which value of said set of specific parameter values is used for said second parameter; and
means for associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell.

Figures 2-5 of the patent, reproduced below (with emphasis added in red), depict one embodiment of such a message.



The neighbor cell information message 200 (Fig. 2) includes (1) a “set of specific parameter values” (e.g., Common Values 220, comprising Parameter 1 Value List 222 of Fig. 4) that contains redundant parameters or parameter sets. *Id.* at 4:62-5:5; 5:35-46. The message also includes (2) “cell information” (e.g., Cell 1 Info 255 of Fig. 3) that includes a parameter **value for a first parameter** (e.g., BSIC 256 of Fig. 5) and an **index for a second parameter** (e.g., Parameter 1 Pointer 257 of Fig. 5) **indicating which value of the set of values** (e.g., Parameter 1 Value List 222) **is used for the second parameter**. *Id.* at 5:6-17 (emphasis added). Thus, for example, Parameter 1 Value List 222 may include a list of values, the second of which could be “855,678.09.” Assuming that multiple cells have the value “855,678.09” for “Parameter 1,” then rather than transmitting that value for Parameter 1 repeatedly for each cell, the value “2,” indicating the second specific value within the Parameter 1 Value List 222 (i.e., “855,678.09”)

can be transmitted instead. *See* Ex. C at 9-10. This substitution of an index for the parameter value is at the heart of the claimed function: “associating a specific value of said set of specific parameter values indicated by one of said index with the corresponding second parameter of a neighbor cell.” Ex. A at ¶¶ 83-84.

The patent explains that the structure corresponding to this function includes means 420 “for associating a value of said set of parameter values indicated by one of said second values with the corresponding parameter of a neighbor cell,” which may be realized using “software programs ... executed by a microprocessor of control block 490.” Ex. B at 6:51-61. Thus, a person skilled in the art would read the patent to disclose a microprocessor for performing the claimed function. Ex. A at ¶ 85. Further, the algorithm disclosed for performing this function is simple: using the parameter value specified by the index for the second parameter. This finds support in, and is clearly linked to, the claimed function by the claim language, specification, and file history. *Id.* at ¶¶ 86-93.

As shown above, claim 11 recites “an index for a second parameter, said index indicating which value of said set of specific parameter values is used for said second parameter.” The fact that the index is “for a second parameter,” and it “indicat[es]” which specific value is used for the second parameter, conveys to one skilled in the art that it is a data structure that, by definition, associates a specific value with a second parameter. Ex. A at ¶ 87. Further, the specific value “indicat[ed]” by the index is “used” for the second parameter, and a skilled artisan would understand that this “use” is use by the claimed mobile device. *Id.* at ¶ 88. Such is apparent from the claim, which recites a device for receiving the index and associating values it specifies. *Id.* Thus, the microprocessor of the device performs the claimed function by using the parameter value specified by the index for the second parameter. *Id.* at ¶¶ 86-88.

This is confirmed in the specification, which repeatedly illustrates and explains that an index (or “pointer”) is used to associate a value with a parameter. *See* Ex. B at 2:15-28; 2:35-43; 3:4-26; 4:11-5:17; 5:35-46; Figs. 2-5. For instance, the patent explains in column 2 that specific parameter values are represented by an index or “pointer:”

Preferably, the neighbor cell information list is transmitted in such a way, that a table reciting parameter values in use by the neighboring cells, and for each of these cells, each value listed in the table is represented by a pointer such as an index to the table. In this way, same parameter values do not need to be repeated for each cell using the same values.

Id. at 2:15-23. This feature is further described in column 3:

In an advantageous embodiment of the invention, those pieces of information which are repeated for a plurality of cells in the neighbor cell information list are recited in a table or some other suitable data structure, and pointers such as indexes to the table are used in the places of pieces of redundant information....

For example, if a certain parameter value is used in more than one cells, values of the particular parameter used in the neighboring cells are placed in a table, and references to a value of this parameter are replaced by a pointer such as an index to the table, which pointer specifies which of the entries in the table is to be used. Such a table is created for each parameter, which has at least one value repeating in more than one cell.

Id. at 3:8-22. And the embodiment described and depicted in Figures 2-5 shows how an index or pointer is used to specify a specific value for a parameter for a specific cell:

FIG. 5 illustrates the structure of a CELLxINFO field 255. This field specifies the information concerning a single neighbor cell. The CELLxINFO field 255 comprises a BSIC field 256, which specifies the BSIC (base station identity code) of the cell. In addition to the BSIC field 256, the CELLxINFO field 255 may comprise also other fields which always contain cell specific information. The CELLxINFO field 255 also comprises PARAMETERxPOINTER fields 257, each of which contains a pointer specifying which of the values of the corresponding PARAMETERxVALUE LIST field 222 is to be used for the particular cell being described by the CELLxINFO field 255.

Id. at 5:6-17. And multiple passages confirm that the pointer or index may specify a set of specific parameter values. *Id.* at 5:35-46 (describing an embodiment in which “the COMMON VALUES field comprises one or more sets of parameter combinations, which parameter

combinations are referred to using pointers or some other ways of indicating an element of a set. One parameter value combination can specify the values of two or more parameters”); 3:23-26 (“In a further embodiments...groups of parameters can be stored in a table.”).

Thus, reading the claim in light of this intrinsic evidence, a person skilled in the art would understand that the microprocessor performs the claimed “association” by using the parameter value specified by the index for the second parameter. Ex. A at ¶¶ 86-93. This algorithm is clearly linked to that function by the claim language describing the index, and its simplicity is commensurate with that of the claimed function. *Id.* at ¶¶ 86-87, 91-92; *see also Optimize Tech. Solutions*, 2013 U.S. Dist. Lexis 164867 at *122 (“[T]he required degree of disclosure of corresponding structure is commensurate with the complexity of the claimed function.”); *Typhoon Touch*, 659 F.3d 1376 at 1385 (Fed. Cir. 2011) (“The amount of detail that must be included in the specification depends on the subject matter that is described and its role in the invention as a whole, in view of the existing knowledge in the field of the invention.”).

Moreover, it constitutes sufficient structure for one skilled in the art to provide an operative software program for the claimed function. Ex. A at ¶¶ 91-92; *Typhoon Touch*, 659 F.3d at 1385 (“[T]he patent need only disclose sufficient structure for a person of skill in the field to provide an operative software program for the specified function.”). Accordingly, the structure for the claimed function is a microprocessor configured to use a parameter (or set of parameters) specified by the index (or pointer) for a parameter of a neighbor cell. Ex. A at ¶ 93.

As noted above, Defendants’ refusal to identify proposed structure for any means-plus-function limitation rests on an erroneous methodology: isolating one passage of the specification and ignoring everything else. An algorithm may be disclosed in any understandable form, and a skilled artisan would recognize that the claims and disclosure describe structure for the claimed

function. CCE's construction is well-grounded in the intrinsic record and should be adopted.

B. U.S. Patent No. 6,810,019

The '019 patent teaches a technique for reducing interference in a CDMA network such as UMTS. *See* Ex. D at 2:1-39; 3:27-33. To facilitate handover and cell reselection processes in such a network, base stations periodically stop transmitting for brief periods of time to allow mobile devices to perform various parameter measurements. *Id.* at 1:26-39; 1:50-67. This brief interruption in transmission is described as a "gap," and the timing of these gaps is determined by "gap" or "measurement" patterns that specify the locations of gaps in a timeslot based on various parameters. *See id.* at 2:15-19; 5:44-6:6.

In order to compensate for a transmission gap, network equipment must briefly increase transmit power to compress information to be transmitted into a shorter time. *Id.* at 2:15-19. When multiple devices in a cell have overlapping transmission gaps, power spikes and interference may occur, which degrade performance. *Id.* at 2:15-39.

The patent addresses this problem by using a device-specific delay for the start of the measurement gap pattern. *Id.* at 3:19-26; 7:4-30. In the preferred embodiment, rather than setting the same delay for all mobile devices, the network allocates different values for the timing parameters sent to each device, thereby setting a device-specific delay for the gap patterns and reducing interference. *Id.* at 7:4-30.

The parties dispute the meanings of two means-plus-function terms appearing in independent claim 11 of this patent. As explained below, the patent discloses sufficient structure linked to the claimed functions, and Defendants' indefiniteness allegations are unfounded.

1. “processing means for arranging gaps in a time-slot frame according to the measurement pattern definitions” (cl. 11)

CCE’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: arranging gaps in a time-slot frame according to the measurement pattern definitions</p> <p>Structure: a processor, controller, or application specific integrated circuit (10:34-52; Fig. 6) configured to apply transmission gap length (TGL), transmission gap distance (TGD), transmission gap pattern length (TGPL), and/or transmission gap period repetition count (TGPRC) parameters (5:53-67; 6:1-19; 6:20-7:3; 7:31-9:5; Fig. 3; Fig. 4A; Fig. 4B; Fig. 5), and equivalents.</p>	<p>Indefinite</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “arranging gaps in a time-slot frame according to the measurement pattern definitions”</p> <p>Structure: no corresponding structure (algorithm) disclosed</p>

The parties agree that the claimed function for this element is “arranging gaps in a time-slot frame according to the measurement pattern definitions.” Figures 4a, 4b, and 5 of the ’019 patent, shown below, illustrate several examples of “measurement pattern definitions:”

	TGL1/2	TGD	TGPL1	TGPL2	TGPRC
Pattern1	7	24/15	4	20	M
Pattern2	7	24/15	4	140	M
Pattern3	7	2	4	Not Used	M
Pattern4	7	2	4	20	M
Pattern5	7	2	4	140	M
Pattern6	14	3	6	18	M
Pattern7	14	3	6	138	M

Fig. 4A (Prior Art)

	TGL1/2	TGD	TGPL1	TGPL2	TGPRC
Pattern8	7	0	72	Not Used	M
Pattern9	7	0	144	Not Used	M

Fig. 4B (Prior Art)

	parameters not optimised				parameters optimised			
UE number	1	2	3	4	1	2	3	4
CFN (frame no.)	1	1	1	1	1	1	1	2
TGSN (slot no.)	4	4	4	4	0	8	4	4
TGL1 (slots)	7	7	7	7	7	7	7	7
TGPL1/2 (frames)	1	1	2	2	1	1	2	2
frame 1 (gap: slot - slot)	4 - 10	4 - 10	4 - 10	4 - 10	0 - 6	8 - 14	4 - 10	-
frame 2 (gap: slot - slot)	4 - 10	4 - 10	-	-	0 - 6	8 - 14	-	4 - 10
frame 3 (gap: slot - slot)	4 - 10	4 - 10	4 - 10	4 - 10	0 - 6	8 - 14	4 - 10	-

Fig. 5

See Ex. D at 3:45-49 (“FIGS. 4a and 4b show some measurement pattern definitions according to prior art ... FIG. 5 shows a comparison between prior art measurement pattern definitions and those of the invention in a table”) (emphasis added). As shown in these figures and described in related text, these measurement pattern definitions comprise a series of parameters, namely:

- “transmission gap length” (TGL), which “defines how long the gap is as a number of time slots;”

- “transmission gap distance” (TGD), which defines “the distance between two consecutive gaps indicated as a number of time slots;”
- “transmission gap pattern length” (TGPL), which “defines the number of consecutive frame which comprise one or two gaps;”
- “transmission gap period repetition count” (TGPRC), which defines “the total time of measurement” as a number of frames;
- “connection frame number” (CFN), which “defines the frame into whose time-slot(s) a gap is left for measuring inter-frequency parameters;” and/or
- “transmission gap starting slot number” (TGSN), which “defines the time-slot of the 15 time-slots in the frame in question, from which the gap starts.”

Id. at 5:53-6:3; 6:20-60; 7:4-8:63. The patent further explains that transmission gaps (which, as noted above, allow a device to perform measurements) are typically defined by TGL, TGPL, TGD, and TGPRC parameters, while CFN and TGSN parameters are used to define a “delay to be used” for the measurement pattern. *Id.* at 6:1-6. Figure 3 illustrates in detail how these TGL, TGPL, TGD, and TGPRC are used to define transmission gaps:

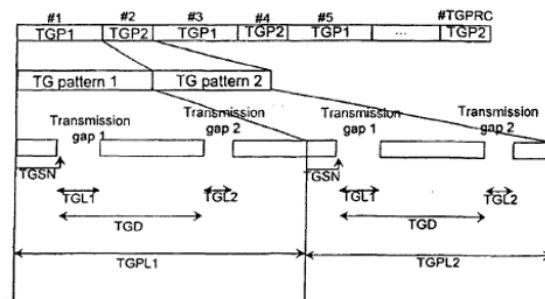


Fig. 3

The patent thus teaches that TGL, TGD, TGPL, and/or TGPRC parameters² define the gaps in a measurement pattern definition.

Turning to the disclosed structure for “arranging gaps in a time-slot frame according to the measurement pattern definitions,” the patent describes a “terminal of the invention” that

² The “and/or” language of CCE’s proposal is supported by the fact that TGD and TGPRC parameters are not identified in the measurement pattern definitions of Figure 5.

includes “processing means 630 for arranging gaps into the time-slot frame according to the measurement pattern definitions.” *Id.* at 10:34-41. Processing means 630 is also referred to as “control means 630,” shown in Figure 6. And the patent further states that “the invention can also be implemented by hardware providing the necessary functionality, for instance ASIC (application specific integrated circuit) or a separate logic.” *Id.* at 10:48-51. Thus, one skilled in the art would read the patent to disclose a processor, controller, or ASIC for performing the claimed function. Ex. A at ¶ 47.

The patent further describes how such a processor would perform the claimed function. In particular, it explains that gaps in a time-slot frame are defined using TGL, TGPL, TGD, and/or TGPRC parameters in a measurement pattern definition, and Figures 3-5 illustrate in detail how this is done. *See* Ex. D at 5:53-67 (defining parameters); 6:1-19; 6:20-7:3; 7:31-9:5. Thus, these parameters are clearly linked to the claimed function, and a person skilled in the art would understand that a processor would “arrang[e] gaps in a time-slot frame according to the measurement pattern definitions” by applying the TGL, TGD, TGPL, and/or TGPRC parameters described at 5:53-67; 6:1-19; 6:20-7:3; 7:31-9:5 and depicted in Figures 3-5. Ex. A at ¶¶ 48-51.

Despite the fact that the specification clearly describes how specific parameters are used to perform the claimed function, Defendants make no attempt to identify an algorithm. Instead, they allege that this term is indefinite based on a single passage in column 10, explaining that the invention may be implemented using software. Doc. No. 272-1 at 2. Their proposal yet again defies credibility by simply ignoring the rest of the specification, which explains in detail how such software can perform the claimed function. Their position has no merit and must fail.

2. “the processing means are also arranged to set for the measurement pattern definition a delay according to the measurement pattern definitions” (cl. 11)

CCE’s Proposed Construction	Defendants’ Proposed Construction
<p>Function: to set for the measurement pattern a delay according to the measurement pattern definition</p> <p>Structure: a processor, controller, or application specific integrated circuit (10:34-52; Fig. 6) configured to apply a connection frame number (CFN) and transmission gap starting slot number (TGSN) parameter combination specific to the terminal (5:46-53; 6:1-19; 7:4-30; 7:31-9:5; Fig. 5), and equivalents.</p>	<p>Indefinite</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “set[ting] for the measurement pattern definition a delay according to the measurement pattern definitions”</p> <p>Defendants propose the following construction for the function: “adapt the value of the delay in the measurement pattern definition according to the measurement pattern definitions”</p> <p>Structure: no corresponding structure (algorithm) disclosed</p>

As explained above, Figures 4a, 4b, and 5 of the ’019 patent illustrate several examples of “measurement pattern definitions.” The patent also explains how two of the parameters in those measurement pattern definitions — namely, CFN and TGSN — can be used to set a measurement delay for the measurement pattern. Ex. D at 5:46-53; 6:3-6; 7:6-9. In particular, it explains that rather than setting the same delay for all mobile devices, compressed mode measurements in a W-CDMA network can be optimized by defining different values of CFN and TGSN for each device, thereby defining device-specific delays. *Id.* at 3:19-26 (“The invention is based on the idea that to make measurements ... non simultaneous, at least partly different delays are set for the measurement patterns defining the measurement gaps of each mobile station[.]”); 7:12-17 (“Instead of setting the same delay for all mobile stations UE, the fixed network UTRAN can preferably allocate different values for the parameters CFN and TGSN for each mobile station....”).

Figure 5 illustrates this principle by comparing measurement patterns that include identical CFN and TGSN values (and thus identical delays) with optimized measurement patterns that include device-specific CFN-TGSN value pairs to set different delays for the measurement patterns. *See id.* at Fig. 5; 7:4-8:63. As shown below, each UE in the table on the left has the same gaps in a timeslot, while the overlap among transmission gaps is minimized in the table on the right:

	parametres not optimised				parametres optimised			
UE number	1	2	3	4	1	2	3	4
CFN (frame no.)	1	1	1	1	1	1	1	2
TGSN (slot no.)	4	4	4	4	0	8	4	4
TGL1 (slots)	7	7	7	7	7	7	7	7
TGPL1/2 (frames)	1	1	2	2	1	1	2	2
frame 1 (gap: slot - slot)	4 - 10	4 - 10	4 - 10	4 - 10	0 - 6	8 - 14	4 - 10	-
frame 2 (gap: slot - slot)	4 - 10	4 - 10	-	-	0 - 6	8 - 14	-	4 - 10
frame 3 (gap: slot - slot)	4 - 10	4 - 10	4 - 10	4 - 10	0 - 6	8 - 14	4 - 10	-

Fig. 5

The patent thus teaches that a device-specific CFN-TGSN parameter combination is used to “set for the measurement pattern a delay according to the measurement pattern definition.”

Turning then to disclosed structure, the patent describes a processor, controller, or ASIC for performing the claimed function. Specifically, it describes a “terminal of the invention” that includes processing means 630 “for adapting the delay according to the measurement pattern definitions for the measurement pattern.” *Id.* at 10:34-41. Processing means 630 is also referred to as “control means 630” in Figure 6. The patent further states that “the invention can also be implemented by hardware providing the necessary functionality, for instance ASIC (application specific integrated circuit) or a separate logic.” *Id.* at 10:48-51. One skilled in the art would thus read the patent to disclose a processor, controller, or ASIC for performing the claimed function. Ex. A at ¶ 62.

Further, as described above, the patent plainly shows that device-specific CFN and TGSN

parameters (which are included in measurement pattern definitions) are used to define a delay for the measurement pattern. Accordingly, use of these parameters is clearly linked to the claimed function, and a skilled artisan would understand that the algorithm disclosed for “set[ting] for the measurement pattern a delay according to the measurement pattern definition” is application of a CFN and TGSN parameter combination specific to the terminal. Ex. A at ¶ 63-66.

Defendants propose construing the claimed function to mirror the function of processing means 630 described in column 10. This is not only unnecessary and disfavored, but is a ploy to focus on a sliver of the patent specification to the exclusion of the broader disclosure. *See Maurice Mitchell Innovations, L.P. v. Intel Corp.*, 2006 U.S. Dist. Lexis 41453, at *19 (E.D. Tex. 2006) (“A district court should not redefine the stated function in a means-plus-function limitation, i.e., by expanding or narrowing the stated function.”). As explained above, the specification sufficiently describes how a computer would perform the claimed function. Defendants’ position is without merit and should be rejected.

C. U.S. Patent No. 7,941,174

The ’174 patent describes a technique for managing power levels when multiple codes are used for transmission simultaneously. *E.g.*, Ex. E at 6:40-49. In CDMA networks, multiple devices can transmit using the same frequency, and the network differentiates the messages of various devices by establishing “a correlation between the received signal and the subscriber-specific code.” *Id.* at 1:59-67. A single device may use multiple codes in parallel, but is subject to a maximum power level for multi-code transmission. *Id.* at 2:45-58.

Multi-code transmission thus gives rise to challenges related to power control, because a mobile device transmitting on multiple codes simultaneously will reach the maximum transmit power level more often than a mobile device transmitting on a single code. *Id.* at 5:1-5. To

address this challenge, the patent describes a technique for determining and maintaining a “transmit power difference,” which ensures that a power reserve remains available while a device is transmitting.

CCE asserts claims 1, 6, 9, 14, 18, and 19. Defendants wrongly contend that the “determining” and “maintaining” phrases of independent claims 1, 9, and 11 are indefinite, and CCE will respond to that allegation to the extent the Court grants Defendants leave to file a motion for summary judgment addressing it. Additionally, the parties dispute the meaning of one claim term that lies within the broader terms Defendants allege to be indefinite.

1. “a transmit power difference which is to be maintained” (cl. 1, 18) / “maintaining a previously determined transmit power difference” (cl. 11)

CCE’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning; no construction necessary.	an unused transmit power that is required to exist

As shown in claim 1 below, the asserted claims expressly define the “transmit power difference” as a difference between “a total maximum transmit power of the subscriber station for the codes” and “a total transmit power of the subscriber station for the codes:”

1. A method for operating a radio communication system in which a subscriber station is assigned a plurality of codes for transmitting messages, comprising:
determining a transmit power difference which is to be maintained by the subscriber station between on one hand a total maximum transmit power of the subscriber station for the codes and on another hand a total transmit power of the subscriber station for the codes at a start of a message transmission using a first one of the codes.

The specification describes the “transmit power difference” consistent with such claim language. For example, the patent explains that, in a preferred embodiment, a “transmit power difference” is analogous to “power headroom,” and corresponds to a power difference that:

is required to exist between the total transmit power for the two codes DCH and EDCH at the start of the transmission of an EDCH message and the maximum

transmit power for the two codes DCH and EDCH. The transmit power difference thus corresponds to an unused transmit power at the start of the transmission of an EDCH message.

Id. at 6:42-49; *see also id.* at 2:41-65. This passage thus describes how a “transmit power difference” can apply in an embodiment using DCH and EDCH codes.

Notably, however, “transmit power difference” is not the disputed term. Rather, Defendants identified “a transmit power difference which is to be maintained” and “maintaining a previously determined transmit power difference” for construction, and attempt, by their definition, to obliterate the underlined portions in favor of words that mean something less than the patentee intended. “Determined,” “maintained,” and “maintaining” are not technical terms; their ordinary meanings are well understood, apply within the context of the asserted claims, and need not be redefined. For instance, consistent with ordinary meaning, the patent explains that a transmit power difference is maintained so long as the distance between the values is kept greater than or equal to the distance. *Id.* at 2:43-45. In other words, “maintaining” the difference does not require keeping an exact distance between the values, but rather keeping the distance at or above a minimum. Because the intrinsic record contains no special definition or disclaimer bearing on the subject phrases, and otherwise uses constituent words in their ordinary sense, the ordinary meaning of the phrases to a person skilled in the art, in light of the claim language and the specification, is the correct construction.

Defendants advocate a construction that is wrong for several reasons. First, it plainly ignores actual claim language and, instead, imports language from the description of a “transmit power difference” in a preferred embodiment. *See id.* at 6:42-49 (quoted above).

Second, and worse, the construction eviscerates claim scope by removing the “which is to be maintained” and “maintaining a previously determined” elements. That is, their construction

combines language from column 6 (describing the “transmit power difference” in a preferred embodiment), without regard to language specifying that the difference is “determined” and further “maintained.” Defendants pretend — without basis — that those portions of the claims do not exist. This is contrary to law, and Defendants’ proposal must fail.

D. U.S. Patent No. 8,055,820

The ’820 patent describes a technique for efficiently communicating “buffer status reports” (“BSRs”), which are messages used in certain data networks to schedule uplink communications (i.e., transmissions from a mobile device to the network). *See, e.g.*, Ex. F at 1:21-25; 5:51-58. For example, in LTE networks, a mobile device may transmit a BSR indicating it has data to send so the network will reserve uplink resources for that data. The ’820 patent reduces overhead resulting from these messages by using different BSR formats, including “long” and “short” formats, which may be selectively transmitted depending on the amount of uplink bandwidth available. *See id.* at 10:29-44.

CCE asserts claims 1, 4, 6-10, 12, 15, 17-21, and 24. Defendants wrongly contend that the “wherein” phrases of independent claims 1 and 12 are indefinite, and CCE will respond to those allegations to the extent the Court grants Defendants leave to file a summary judgment motion on the issue. The parties otherwise dispute the meaning of one term in claim 12.

1. “the designating unit” (cl. 12)

CCE’s Proposed Construction	Defendants’ Proposed Construction
<p>“the memory, processor, and computer program code configured to designate” (not subject to 112(6)).</p> <p>Alternatively, should the Court determine this is a means-plus-function claim element subject to 35 U.S.C. 112(6):</p> <p>Function: “designating the long buffer status reporting format when there is sufficient</p>	<p>Indefinite</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “designat[ing] the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.”</p>

uplink bandwidth to communicate using the long buffer status reporting format” Structure: a VLSI circuit, semiconductor, or processor (7:15-24, FIG. 2) configured to assign a buffer status reporting format depending on the preselected condition detected and uplink bandwidth, and/or buffer priority (FIGS. 2-4; 6:1-42; 7:58-8:1; 8:17-39; 10:29-44), and equivalents	Structure: no corresponding structure disclosed
---	---

The meaning of the disputed phrase is apparent from the claims and file history: “the designating unit” refers to and further describes the element that “designates,” namely, “the memory and the computer program code configured to, with the processor, cause the apparatus at least to ... designate one of a plurality of buffer status reporting formats[.]” Claim 12 is shown below with relevant language underlined:

12. An apparatus, comprising:
a processor; and
a memory including computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to monitor a usage of a plurality of buffers;
detect one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
designate one of a plurality of buffer status reporting formats comprising a long buffer status reporting format and a short buffer status reporting format depending on the pre-selected condition detected; and
communicate a buffer status report to a network device in accordance with the buffer status reporting format designated, wherein the designating unit is configured to designate the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.

The claim recites a processor, memory, and program code configured to “designate” a “long” buffer status reporting format depending on a particular condition, and specifies that “the designating unit” (not previously referenced) likewise “designates” a “long” buffer status reporting format based on another condition. Thus, the processor, memory, and program code that “designate” and “the designating unit” perform the same function: designating a long buffer

status reporting format. Moreover, “the designating unit” is referenced in a “wherein” clause, denoting that it further describes a previous element. One skilled in the art would thus understand from the language of claim 12 that the “designating unit” is a reference to the claimed processor, memory, and computer program code configured to “designate.” Ex. A at ¶¶ 96-101.

This understanding is clearly confirmed by other claims and the file history. Claims 23 and 24 mirror claim 12, and each includes a “wherein” clause that refers back to the “designating” element recited previously:

23. An apparatus, comprising:
 monitoring means for monitoring a usage of a plurality of buffers;
 detecting means for detecting one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
designating means for designating one of a plurality of buffer status reporting formats comprising a long buffer status reporting format and a short buffer status reporting format depending on the pre-selected condition detected; and
 communicating means for communicating a buffer status report to a network device in accordance with the buffer status reporting format designated, **wherein the designating means** designates the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.

24. A non-transitory computer-readable medium encoded with a computer program configured to control a processor to perform operations comprising:
 monitoring a usage of a plurality of buffers;
 detecting one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
designating one of a plurality of buffer status reporting formats comprising a long buffer status reporting format and a short buffer status reporting format depending on the pre-selected condition detected; and
 communicating a buffer status report to a network device in accordance with the buffer status reporting format designated, **wherein the designating** designates the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.

The manifest parallels between claims 12, 23, and 24 confirm that the inventors intended “the designating unit” to be construed as CCE proposes.

This understanding is also twice confirmed in the file history. In the first instance, the patent examiner interpreted a claim nearly identical to claim 12 just as CCE proposes. Specifically, the originally-filed claims included a dependent method claim that, just like claim 12, referenced “the designating unit” without antecedent basis:

1. A method, comprising:
 monitoring a usage of a plurality of buffers;
 detecting one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
 designating one of a plurality of buffer status reporting formats depending on the pre-selected condition detected; and
 communicating a buffer status report to a network device in accordance with the buffer status reporting format designated.

6. The method of claim 4, wherein **the designating unit** is configured to only designate the long buffer status reporting format when there is sufficient uplink capacity to communicate using the long buffer status reporting format.

Ex. G at 22. The examiner expressly interpreted the “designating unit” of claim 6 to refer to the “designating” step of claim 1, confirming the obvious relationship between those claim elements. Ex. H at 3.

In the second instance, claim 12 (as originally presented) recited multiple “units,” including a “monitoring unit,” “detecting unit,” “designating unit,” and “communicating unit.” Ex. G at 22. The examiner rejected this claim, alleging that the claimed “units” were directed to “software per se.” See Ex. H at 3. The applicants traversed this rejection, but ultimately mooted the issue by rewriting the claim to recite a processor, memory, and computer program code configured to perform specific steps, rather than various “units:”

19. (Currently Amended) An apparatus, comprising:
~~a processor; and~~
~~a memory including computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to a~~
~~monitoring unit configured to monitor a usage of a plurality of buffers;~~
~~a detecting unit configured to detect one of a plurality of pre-selected conditions~~
~~corresponding to the plurality of buffers;~~
~~a designating unit configured to designate one of a plurality of buffer status~~
~~reporting formats comprising a long buffer status reporting format and a short buffer~~
~~status reporting format depending on the pre-selected condition detected; and~~
~~a communicating unit configured to communicate a buffer status report to a~~
~~network device in accordance with the buffer status reporting format designated, wherein~~
~~the designating unit is configured to designate the long buffer status reporting format~~
~~when there is sufficient uplink capacity to communicate using the long buffer status~~
~~reporting format.~~

Ex. I at 5-6 (emphasis added). This amendment clearly shows that “the designating unit” is an artifact of prosecution, and the applicants never intended “the designating unit” to constitute a new element or invoke § 112(6). Rather, it was originally drafted to refer back to the “designating” element recited previously in the claim, just as CCE now proposes. The fact that

“the designating unit” was not revised in this amendment is an obvious, minor error that the Court should simply correct.³ The claims and file history demonstrate that, without exception, the inventors originally drafted the “wherein” element to refer to the previous element that “designates.” Accordingly, the correct construction of “the designating unit” is “the memory, processor, and computer program code configured to designate.”

Defendants wrongly contend that the phrase is a means-plus-function element. As a threshold matter, the claim does not use the term “means.” Thus, there is a strong presumption that 35 U.S.C. § 112(6) does not apply. *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371-1372 (Fed. Cir. 2003) (“It is well settled that ‘[a] claim limitation that actually uses the word ‘means’ invokes a rebuttable presumption that § 112, P 6 applies. By contrast, a claim term that does not use ‘means’ will trigger the rebuttable presumption that § 112, P 6 does not apply. The term ‘means’ is central to the analysis.”); *Apple Inc.*, 757 F.3d at 1297-98 (“The strong presumption created by not including means in a claim limitation provides clarity and predictability for the public and the patentee alike.”).

Further, claim 23 was clearly written as a means-plus-function claim, confirming that the inventors knew how to invoke § 112(6) when they intended to do so. *Maurice Mitchell Innovations*, 2006 U.S. Dist. LEXIS 41453 at *36-37 (“[A]n applicant has a choice whether to invoke both the advantages and disadvantages of presenting means-plus-function limitations – or not.”). There is simply no evidence that claim 12 was drafted with such an intent. To the contrary, the claims and file history convincingly show that the phrase refers back to the memory

³ See *Smartphone Techs. LLC v. Research in Motion Corp.*, 2012 U.S. Dist. LEXIS 108370, *16 (E.D. Tex. Aug. 2, 2012) (“Courts may ‘correct an error in a patent by interpretation of the patent where no certificate of correction has been issued . . . only if: (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims” (citing *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003); *STMicronics, Inc. v. Motorola, Inc.*, 327 F. Supp. 2d 687, 701 (E.D. Tex. 2004))).

and computer program code configured to “designate.”

Indeed, the weakness of Defendants’ position was revealed in their P.R. 4-2 disclosures indicating that only a subset of the Defendants initially supported their current position. Ex. M at 6. Likewise, the *inter partes* review petition submitted by Defendants NEC, HTC, ZTE, Amazon, Pantech, LG, and Dell does not allege that this claim language should be interpreted as a means-plus-function limitation. Ex. J at 18-19.

However, should the Court find that “the designating unit” invokes § 112(6), the claimed function is “designating the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.” Ex. A at ¶ 102. The structure clearly linked to this function is a VLSI circuit, semiconductor, or processor (described at 7:15-24 and shown in FIG. 2) configured to assign a buffer status reporting format depending on the preselected condition detected and uplink bandwidth, and/or buffer priority. *Id.* at ¶¶ 104-110. This algorithm is depicted in Figures 2-4 and described in the specification at 6:1-42, 7:58-8:1, 8:17-39, and 10:29-44. *See esp.* Ex. F at 6:10-36 (“[T]he designating unit 260 is configured to designate one of a plurality of buffer status reporting formats depending on the pre-selected condition detected.... In such embodiments, the buffer prioritizing unit 250 may collaborate with the uplink capacity detecting unit 240 and the designating unit 260 to enable the designating unit 260 to assign/designate the most beneficial buffer status reporting format to the buffer of the highest priority, all in accordance with the uplink capacity of the user equipment 200.”).

E. U.S. Patent No. 7,218,923

The ’923 patent relates to mobile device security. Many mobile devices available today utilize “open” platforms that allow developers unaffiliated with the manufacturer to create applications for users to install and execute. Ex. K at 1:31-37. Open development offers many

benefits, but security is a perennial concern in light of the possibility that unscrupulous developers might attempt to fraudulently exploit devices and services. *Id.* at 1:38-47.

The '8923 patent thus describes security features that can be used to control messages sent by applications. More specifically, it describes a terminal capable of diverting a message, before it is transmitted to a network, to a controlling entity and, based on the message, controlling whether the application behaves in a predetermined manner. *See id.* at 1:59-2:11. CCE asserts claims 24, 26, and 32. The parties dispute the meanings of two terms.

1. “a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network” (cl. 24)

CCE’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning; no construction necessary.	“a diverting unit configured to redirect a message of the messages sent from the application program and destined for the communication network from the path it would have taken if not redirected on to an alternate path”

The disputed term uses ordinary language in its ordinary sense, and there are no special definitions or disclaimers applicable to this claim element. While CCE does not dispute that “diverting” and “redirecting” have consistent meaning, it is improper to rewrite the claim in the manner Defendants propose. Defendants’ revisions to the claim language are shown below:

“a diverting unit configured to ~~divert~~ **redirect** a message of the messages sent from the application program and destined for the communication network **from the path it would have taken if not redirected on to an alternate path**”

This proposal appends language about “paths” that finds no support in the intrinsic record.

According to the '8923 patent, a “diverted” message is made subject to a controlling entity separate from the application. In particular, while some messages are forwarded to the network without additional processing, certain messages are “diverted” to the controlling entity,

which may “evaluate[] whether any changes are needed.” *See* Ex. K at 1:59-1:65. The controlling entity may then “return[] the message intact or in a modified form” or “prohibit the sending of the message[.]” *See id.* at 1:65-2:11.

Nothing in the intrinsic record of the ’8923 patent preordains primary and “alternate” physical paths for particular messages. Rather, the invention is intended for a logic-oriented computer environment, and the claimed “diversion” may be implemented in a logical, rather than physical, sense. For example, a message could be logically “diverted” by copying it to a location where a controlling entity can examine it. Indeed, the specification describes embodiments in which “diverting” is performed by software such as SIP Protocol Stack 220 of Figure 2 or “middleware” residing between applications and a protocol stack. *See id.* at Fig. 2; 4:46-63; 6:49-55. Neither the claims nor the specification require physically diverting a message to a particular path, and it is improper to restrict them by imposing such a paradigm.

Indeed, the lack of intrinsic support for Defendants’ proposal is confirmed by Defendants’ *inter partes* review petition, which construes “diverting a message of the messages” to mean “transferring at least some of the messages to a different destination than their intended destination,” or “diverting at least some of the messages on their way to their destination.” Ex. L at 14, 18. Significantly, that petition says nothing of alternate message “paths.” This inconsistency flows from Defendants’ attempt to gain advantage in different forums and reveals the flaws of their proposal here. Their construction is improper and must be rejected.

2. “based on the message” (cl. 24)

CCE’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning; no construction necessary.	“based on the contents of the message”

This disputed term likewise uses ordinary language in its ordinary sense, consistent with

the specification, and Defendants' limiting proposal is improper. The patent broadly describes embodiments in which a controlling entity receives and evaluates a message from an application. *See, e.g.*, Ex. K at 1:59-2:3. Such messages (such as an INVITE request) include not only data content (i.e., a "payload"), but additional information such as the "identifier of the application" that sent it. *See id.* at 4:51-53. The controlling entity may examine such messages and check whether the applications that sent them are behaving as they should. *Id.* at 4:61-63 ("The trusted agent [a controlling entity] examines the request and checks, whether the application behaves as it should be behaving[.]"). In one embodiment, a controlling entity compares the behavior of the application that sent the message to a set of policy rules for that application that may include "load parameters that indicate whether an application is causing excessive load." *Id.* at 6:27-48. To perform this comparison, the controlling entity examines the message (including the application identifier, to identify the applicable policy), as well as the behavior of the application. *See id.*

Defendants' attempt to restrict the claim to controlling based on the content of a message is therefore improper. The claim does not restrict how a message is used, nor do the specification or file history redefine or disclaim the scope of this element. Indeed, Defendants' *inter parties* review petition argues that "based on the message, controlling ... whether the application program behaves in a predetermined manner" simply means "exerting control of the behavior of the application program based on a message diverted to the controlling entity." Ex. L at 14-15. Again, Defendants seek to have it both ways, advocating a narrow construction to avoid liability in this forum while proposing a broader construction to the Patent Office for invalidity. Defendants' proposal is improper and should be rejected.

Dated: **October 30, 2014.**

By:

/s/ Edward R. Nelson, III

Edward R. Nelson, III

enelson@nbclaw.net

Texas State Bar No. 00797142

Brent N. Bumgardner

bbumgarnder@nbclaw.net

Texas State Bar No. 00795272

Barry J. Bumgardner

barry@nbclaw.net

Texas State Bar No. 00793424

S. Brannon Latimer

blatimer@nbclaw.net

Texas State Bar No. 24060137

Thomas C. Cecil

tcecil@nbclaw.net

Texas State Bar No. 24069489

NELSON BUMGARDNER CASTO, P.C.

3131 West 7th Street, Suite 300

Fort Worth, Texas 76107

Phone: (817) 377-9111

Fax: (817) 377-3485

T. John Ward, Jr.

Texas State Bar No. 00794818

J. Wesley Hill

Texas State Bar No. 24032294

Claire Abernathy Henry

Texas State Bar No. 24053063

WARD & SMITH LAW FIRM

P.O. Box 1231

1127 Judson Rd. Ste. 220

Longview, Texas 75606-1231

(903) 757-6400

(903) 757-2323 (fax)

jw@jwfirm.com

wh@wsfirm.com

claire@wsfirm.com

**ATTORNEYS FOR PLAINTIFF
CELLULAR COMMUNICATIONS
EQUIPMENT LLC**

CERTIFICATE OF SERVICE

I hereby certify that on the 30th day of October, 2014, I electronically filed the foregoing document with the clerk of the Court for the U.S. District Court, Eastern District of Texas, Tyler Division, using the Court's electronic case filing system. The electronic case filing system sent a "Notice of Electronic Filing" to the attorneys of record who have consented in writing to accept this Notice as service of this document by electronic means.

/s/ Edward R. Nelson, III